

Neue und interessante Milben
aus dem Genfer Museum LVII.
Oribatida Americana 9: Antilles I (Acari)

by

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With 61 figures

ABSTRACT

New and interesting mites from the Geneva Museum LVII. Oribatida Americana 9: Antilles I (Acari). — 24 species of Oribatids from Guadeloupe and nearby smaller islands are identified, 14 of them are described as new to science, 3 of them necessitating also the establishment of new genera: *Antillobodes* gen. n. (*Carabodidae*) and *Antilloppia* gen. n. (*Oppiidae*), this latter represents also a new subfamily (*Antilloppiinae* subfam. n.).

INTRODUCTION

Zoogeographical studies in the environs of the Caribbean Islands are indispensable to a better understanding of the problematics of the whole of Neogaea. It is especially important to examine the fauna of the smaller islands to gain an insight into the dispersion of species and possible modes of dispersal. In recent years BALOGH and MAHUNKA (1974, 1979, 1980) more intensively treated the fauna of Cuba, however, the fauna of the other islands, besides some lesser contributions (WILLMANN 1930, 1933; GRANDJEAN 1929, 1930; MAHUNKA 1980), is well-nigh unknown, and the so far published data are so meagre as to be wholly unsuitable for comparative purposes.

Therefore I was happy to undertake the elaboration of the material kept in the Arthropoda Section of the Geneva Museum on a special request of the organizer of the collections, Dr. B. Hauser. The present contribution proposes to treat the results of my

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examination of soil samples from Guadeloupe and nearby smaller islands, collected mostly by Dr. P. Schauenberg, Mrs L. Comte, Mr P. Jornot and Mr I. Geneux. The soil samples were extracted by Berlese apparatus at the Geneva Museum.

I was able to identify 24 species, of which 14 proved to be new to science. Two of them represent two new genera (*Antillobodes* and *Antilloppia*) to be included in a new sub-family within the family of *Opipiidae*. The identified species are mostly new to the fauna of Guadeloupe, but owing to scanty data as referred to above, far-reaching conclusions may not yet be drawn from the data presented.

LIST OF LOCALITIES

- Ant-82/2: Guadeloupe: Côte ouest de Basse-Terre: Rocroy. Région sèche. Végétation xérophile, buissons épineux avec cactées (*Cereus*) et crassulacées. Sous une grosse pierre, alt. env. 100 m, 31.I.1982, leg. P. Schauenberg.
- Ant-82/8: Guadeloupe: Grande-Terre: Pointe-des-Châteaux, extrémité est de l'île, zone d'embruns avec *Carex* et buissons de *Cocoloba uvifera* (Raisin-bord-de-mer) 1.II.1982, leg. P. Schauenberg.
- Ant-82/9: Guadeloupe: Grande-Terre: Gosier, sud de Grande-Terre. Sol dans sous-bois humide, 2.II.1982, leg. P. Schauenberg.
- Ant-82/10: Guadeloupe: Grande-Terre: Entre Grands-Fonds et Deshauteurs, région karstique des Grands-Fonds, zone herbeuse parsemée de buissons, alt. 160 m, 2.II.1982, leg. P. Schauenberg.
- Ant-82/15: Marie-Galante: Les Galets: Est de l'île, broussailles à 500 m de la mer, alt. 20 m, 5.II.1982, leg. P. Schauenberg.
- Ant-82/16: Les Saintes: Terre-de-haut: Côte nord à l'ouest de l'aérodrome, à 40 m de la plage, alt. 0 m, sous des mancenillers (*Hippomane mancinella*), 12.II.1982, leg. F. Jornot.
- Comte/1: Guadeloupe (Basse-Terre): Forêt de *Podocarpus* au versant sud de la Soufrière, près des Bains Jaunes, 800 m, 29.III.1979, leg. L. Comte.
- Comte/2: Guadeloupe (Basse-Terre): Forêt de *Podocarpus* sur le versant sud de la Soufrière, près de Bains Jaunes, env. 800 m, sur tronc pourri. 29.III.1979, leg. L. Comte.
- Geneux/1: Guadeloupe (Grande-Terre): prélèvement de terre dans le «Fort Fleur d'Épée», 4 m, 31.XII.1977, leg. J. Geneux.
- Geneux/2: Guadeloupe (Grande-Terre): «La Grande Baie», près du Novotel, prélèvement de terre, 31.XII.1977, leg. J. Geneux.
- Geneux/3: Guadeloupe (Basse-Terre): prélèvement de terre aux «Mamelles-des-Pigeons» sur la route D23, 586 m, 29.XII.1977, leg. J. Geneux.
- Geneux/4: Guadeloupe (Basse-Terre): prélèvement de terre près des «Chutes du Carbet», Mont Soufrière, 500-600 m, 29.XII.1977, leg. J. Geneux.

LIST OF IDENTIFIED SPECIES

Ctenacaridae Grandjean, 1954

Ctenacarus araneola (Grandjean, 1932)

Locality: Ant-82/2: 8 specimens.

Lohmanniidae Berlese, 1916*Haplacarus javensis* Hammer, 1979

Localities: Ant-82/9: 1 specimen; Ant-82/10: 3 specimens.

Heptacarus neotropicus sp. n.

Locality: Ant-82/15.

Javacarus porosus Hammer, 1979

Localities: Ant-82/10: 5 specimens; Ant-82/16: 1 specimen.

Lohmannia jornoti sp. n.

Localities: Ant-82/15; Ant-82/9; Geneux/1.

Torpacarus omittens Grandjean, 1950

Locality: Geneux/1: 1 specimen.

Trhypochthoniidae Willmann, 1931*Allonothrus russeolus* Wallwork, 1965

Localities: Ant-82/9: 50 specimens; Geneux/2: 1 specimen.

Nanhermanniidae Sellnick, 1928*Cyrthermannia foliata* sp. n.

Locality: Ant-82/10.

Cyrthermannia guadeloupensis sp. n.

Locality: Ant-82/10.

Microzetidae Grandjean, 1936*Microzetes auxiliaris* Grandjean, 1936

Locality: Ant-82/2: 2 specimens.

Carabodidae C. L. Koch, 1837*Antillobodes calcaratus* gen. n., sp. n.

Locality: Ant-82/2.

Antillobodes inopinatus sp. n.

Locality: Ant-82/2.

Oppiidae Grandjean, 1954*Aeroppia sculpturata* sp. n.

Locality: Ant-82/15.

Antillopedia schauenbergi gen. n., sp. n.

Localities: Ant-82/8; Ant-82/15.

Oppiella nova (Oudemans, 1902)

Locality: Geneux/4: 1 specimen.

Rioppia comteae sp. n.

Locality: Comte/1.

Cymbaeremaeidae Sellnick, 1928*Scapheremaeus latus* sp. n.

Localities: Ant-82/9; Ant-82/10.

Scutoverticidae Grandjean, 1954*Arthrovertex hauseri* sp. n.

L o c a l i t y : Comte/2.

Haplozetidae Grandjean, 1936*Perxylobates sinlimes* (Hammer, 1971)

L o c a l i t y : Comte/1: 4 specimens.

Perxylobates vermiseta (Balogh et Mahunka, 1968)

L o c a l i t y : Ant-82/9: 12 specimens.

Rostrozetes geneuxi sp. n.

L o c a l i t i e s : Geneux/1; Ant-82/8.

Genavensiidae Mahunka, 1983*Genavensia longiseta* sp. n.

L o c a l i t y : Comte/2.

Galumnidae Jacot, 1925*Galumna flabellifera* Hammer, 1958

L o c a l i t i e s : Ant-82/8: 6 specimens; Ant-82/9: 50 specimens; Ant-82/16: 3 specimens.

Galumna hamifer sp. n.

L o c a l i t y : Ant-82/9.

DESCRIPTIONS

Heptacarus neotropicus sp. n.M e a s u r e m e n t s : Length: 542-567 μm , width: 259-283 μm .

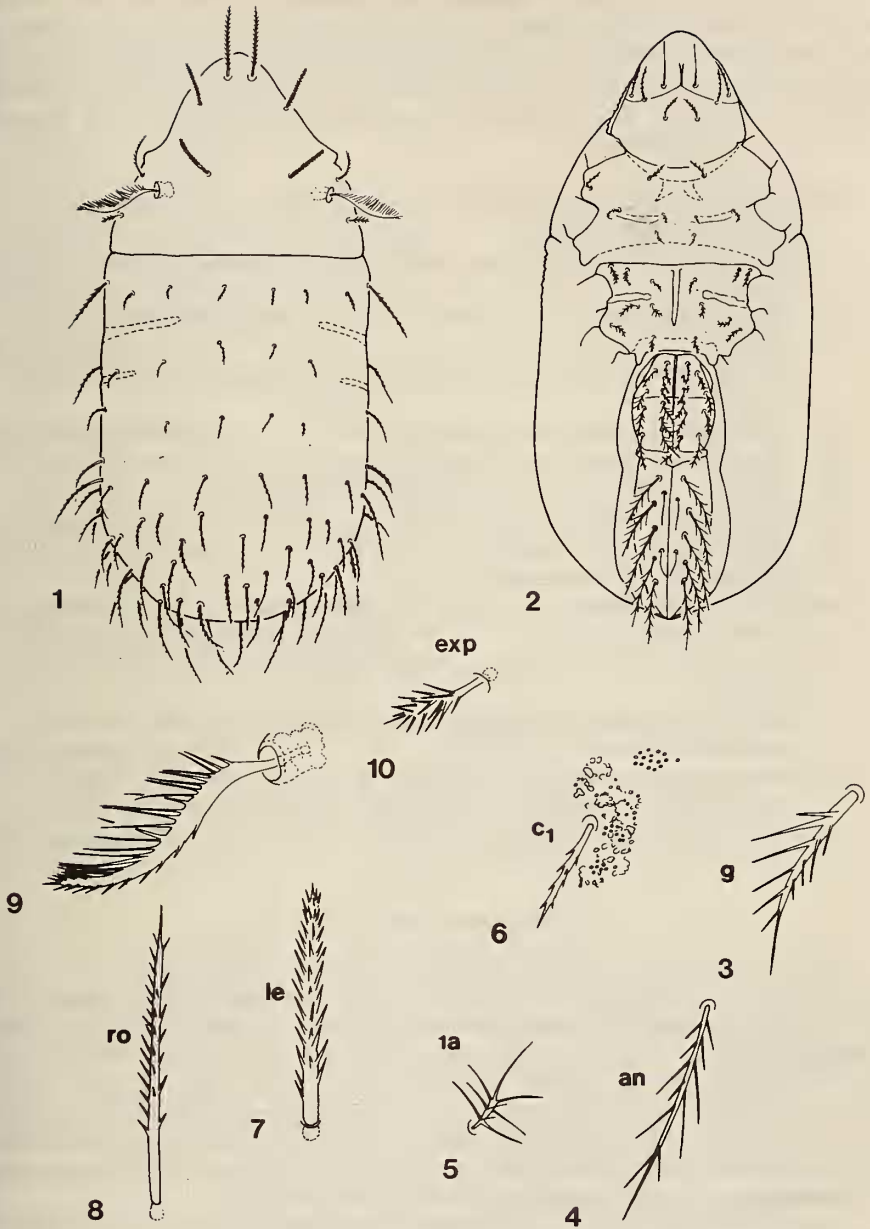
D o r s a l s i d e (Fig. 1): Cuticle with granules forming a polygonal reticulation, in deeper layer irregular fields with pori (Fig. 6). Rostrum rounded, lateral margin with minute teeth laterally. Lamellar and interlamellar setae much more ciliate as rostral ones (Figs 7-8). Setae *exp* short, with long cilia (Fig. 10). Peduncle of sensillus (Fig. 9) slightly incrassate, one side with about 20 long branches, progressively shortening from the middle to the apex, the other side with some minute spines. Notogaster with strong neotrichy, without difference between the normal and neotrichial setae. Setae $c_{1,2}$, $d_{1,2}$, and $e_{1,2}$ very short, much shorter than *cp* or the marginal setae of notogaster.

V e n t r a l s i d e (Fig. 2): Epimeres without neotrichy. Epimeral setal formula: 3-1-3-4. Epimeral setae with long branches (Fig. 5). Anogenital region typical, genital (Fig. 3) and anal setae (Fig. 4) with long branches, too.

M a t e r i a l e x a m i n e d : Holotype: Ant-82/15; 1 paratype: from the same sample. Holotype: MHNG ¹; paratype (801-PO-83): HNHM ².

¹ MHNG = deposited in the Muséum d'Histoire naturelle, Genève.

² HNHM = deposited in the Hungarian Natural History Museum, Budapest, with identification number of the specimens in the Collection of Arachnida.



FIGS. 1-10.

Heptacarus neotropicus sp. n. — 1: dorsal side, 2: ventral side, 3: genital seta, 4: anal seta, 5: epimeral seta, 6: sculptur of notogaster around seta c₁, 7: lamellar seta, 8: rostral seta, 9: sensillus, 10: seta exp.

R e m a r k s : The genus *Heptacarus* was established by PIFFL from the southern part of the Palaearctic Region. Some other species have been added from the Ethiopian and Oriental Regions, but none was known until now from the Neotropical Region. The new species is characterized by strong notogastral neotrichy. The great differences existing among the notogastral setae distinguish it from all the allied species. They are easily separable by the following key:

- 1 (4) Notogaster with weak neotrichy, altogether not more than 40 pairs of notogastral setae present.
- 2 (3) No marginal neotrichy between setae f_2 and ps_1 . Notogastral setae finely ciliate *notoneotrichus* Piffli, 1963
- 3 (2) Marginal neotrichy between setae f_2 and ps_1 . Notogastral setae strongly ciliate *piffli* Mahunka, 1977
- 4 (1) Notogaster with strong neotrichy, more than 60 pairs of notogastral setae present.
- 5 (6) All notogastral setae equal in length *supertrichus* Piffli, 1966
- 6 (5) Setae of the anterior part of notogaster much shorter than pygidial setae.
- 7 (8) Among notogastral setae great length differences exist, c_2 or c_1 more than thrice longer than c_4 ; c_2 shorter than c_1 *neotropicus* sp. n.
- 8 (7) Difference among notogastral setae smaller, c_2 or c_1 equal in length and not more than twice as long as c_4 .
- 9 (10) Infracapitulum bears only two pairs of setae (?). Setae c_1 shorter than c_2 , d_1 shorter than d_2 *plumosus* (Hammer, 1973) comb. nov. ³
- 10 (9) Infracapitulum with four pairs of setae. Setae c_1 longer than c_2 , d_1 longer than d_2 .
- 11 (12) Body surface evenly punctate. Anterior anal hairs merely one-third of the shortest adanal hair *hirsutus* Wallwork, 1964
- 12 (11) Body surface ornamented with a distinct polygonal sculpture, polygons small and close together. Anterior anal hair approximately as long as shortest adanal hair (ad_s) *reticulatus* Mahunka, 1977

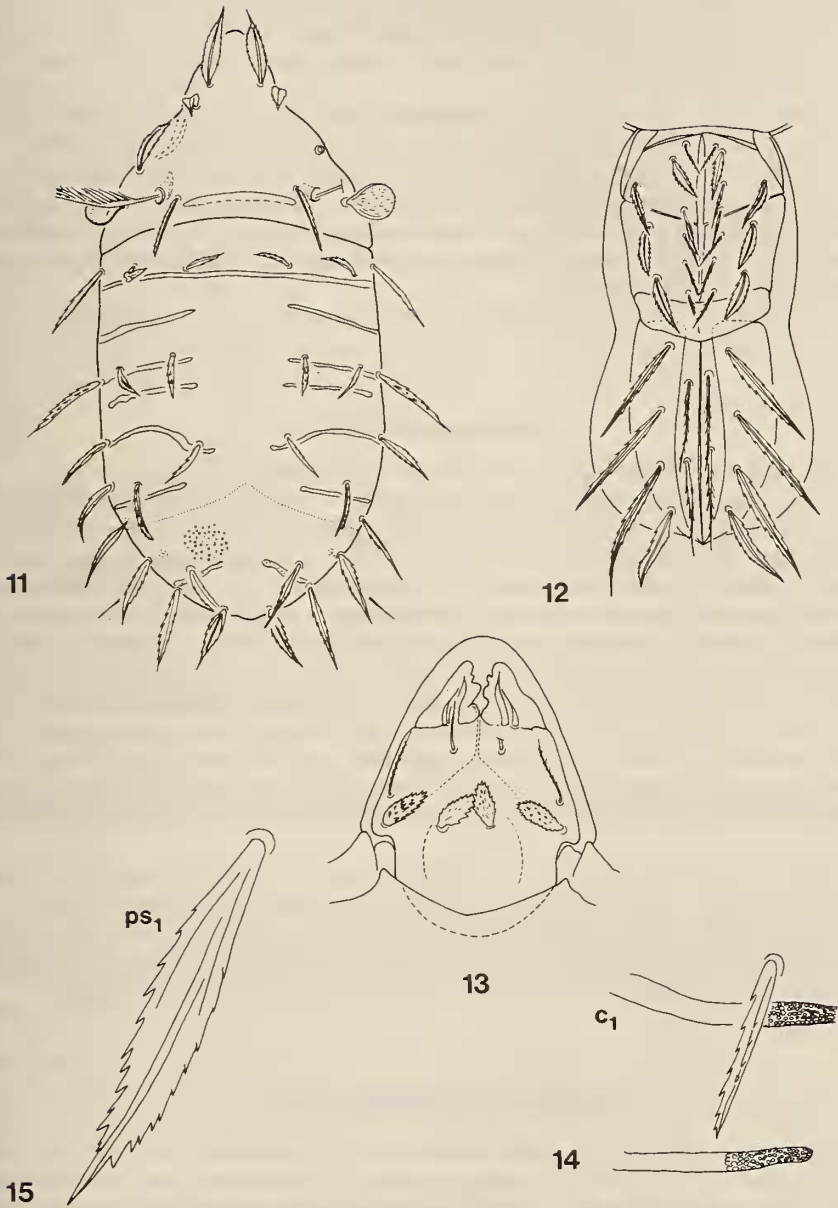
***Lohmannia jornoti* sp. n.**

M e a s u r e m e n t s : Length: 794-826 μm , width: 389-410 μm .

D o r s a l s i d e (Fig. 11): Rostral part of prodorsum elongated, lateral margin only slightly angulate. Rostral setae strongly dilated, phylliform, interlamellar and anterior exostigmatal setae slender. Posterior exostigmatal setae nearly round, its surface barbed. Lateral margins of notogaster nearly parallel. Well-developed transverse bands, similar in shape to those of *Lohmannia lanceolata* Grandjean, 1950. Sixteen pairs of well-dilated, phylliform notogastral setae, different in lengths. Setae of inner rows much shorter and thinner (Fig. 14) than those in marginal positions. Setae ps_1 (Fig. 15) shorter but conspicuously broader than ps_2 or h_1-h_2 . Pygidial part of notogaster punctate.

V e n t r a l s i d e (Fig. 12): Infracapitulum bears four pairs of setae, among them h and a well dilated, broadly phylliform (Fig. 13), their margin and surface barbed or serra-

³ *Neotrichacarus* Hammer, 1973 — in my opinion — is a synonym of *Heptacarus* Piffli, 1963. Therefore *Heptacarus plumosus* (Hammer, 1973) comb. nov. = *Neotrichacarus plumosus* Hammer, 1973.



FIGS. 11-15.

Lohmannia jornoti sp. n. — 11: dorsal side, 12: ventral side, 13: mentum, 14: seta c_1 , 15: seta ps_1 .

tely ciliate. Epimeral setal formula: 3-1-3-4, all setae phylliform, but median setae much smaller than lateral ones. Genital setae partly also dilated, those in lateral position phylliform. Anterior lateral setae (g_9) arising very near to anterior median (g_{10}) ones. Both pairs of anal setae simple, not dilated, four pairs of adanal setae phylliform, ad_1 shorter than the other three pairs.

M a t e r i a l e x a m i n e d : Holotype: Ant-82/15; 30 paratypes: from the same sample. Holotype and 18 paratypes: MHNG; 12 paratypes (802-PO-83): HNHM.

R e m a r k s : Four species of the genus *Lohmannia* have hitherto been known from tropical region characterizable by the round posterior exostigmatal setae. The new species is well distinguished from them by the short and lamelliform ps_1 setae and the similar ad_1 setae. In the other species they are long and much less dilated. The shape of the infracapital setae is also very characteristic.

I dedicate the new species to Mr P. Jornot, the collector of this material.

Cyrthermannia foliata sp. n.

M e a s u r e m e n t s : Length: 598-607 μm , width: 243-251 μm .

D o r s a l s i d e (Fig. 16): Rostrum nasiform. Rostral and lamellar setae dilated, latter arising on a pair of tubercles, near to each other. Interlamellar setae phylliform with a short pointed tip. Sensillus stick-like, nearly straight and slightly thickening distally. Its distal end densely barbed. Anterior part of prodorsum — excepting a thin median region — well foveolate, posterior part densely punctate with some foveolae in the middle. Hind margin of prodorsum with one pair of double teeth, not connected medially. Lateral and posterior margin of notogaster waved by protuberances. Surface sculptured by foveolae of different sizes in irregular position. Fifteen pairs of lead-shaped notogastral setae (Fig. 17).

V e n t r a l s i d e (Fig. 18): Epimeral setal formula: 3-1-3-4. Among them *la*, *lc*, *2a*, *3a* and *4b* short, barbed, others long, somewhat phylliform and ciliate. Surface of epimeres punctate, anogenital region foveolate. Nine pairs of long genital, two pairs of similar aggenital setae present. Anal and adanal setae also phylliform, latter much larger than former.

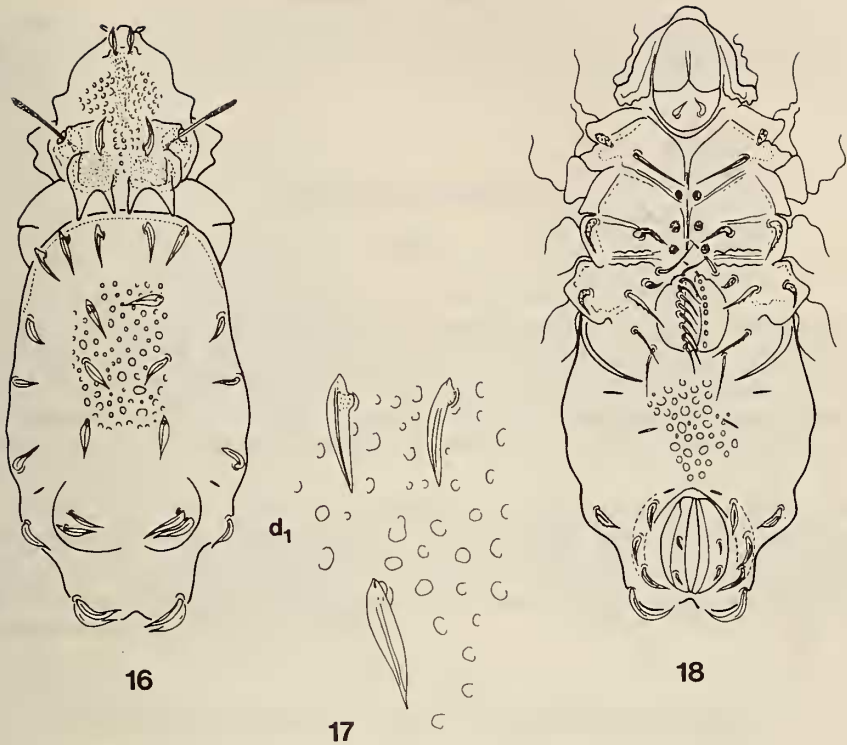
M a t e r i a l e x a m i n e d : Holotype: Ant-82/10; 16 paratypes: from the same sample. Holotype and 10 paratypes: MHNG; 6 paratypes (803-PO-83): HNHM.

R e m a r k s : It is the second *Cyrthermannia* Balogh, 1958 species from this region. The new species differs from this species and from all its congeners by the phylliform setae of prodorsum and notogaster, which has hitherto been unknown in this genus.

Cyrthermannia guadeloupensis sp. n.

M e a s u r e m e n t s : Length: 502-535 μm , width: 178-210 μm .

D o r s a l s i d e (Fig. 19): Rostrum rounded. Rostral setae short, curving inward. Lamellar setae originating near to each other on a short transversal lamellar crest, phylliform. Interlamellar setae a little longer than the latter and with one proximal spur. Sensillus short, thickened, distal part barbed. Hind margin of prodorsum with a pair of large, sharp teeth. Anterior part of prodorsum foveolate, basal part punctate — excepting the middle — where some foveolae visible. Notogaster with 15 pairs of phylliform setae, like interlamellar ones. Surface foveolate, foveolae smaller anteriorly and larger posteriorly.



FIGS. 16-18.

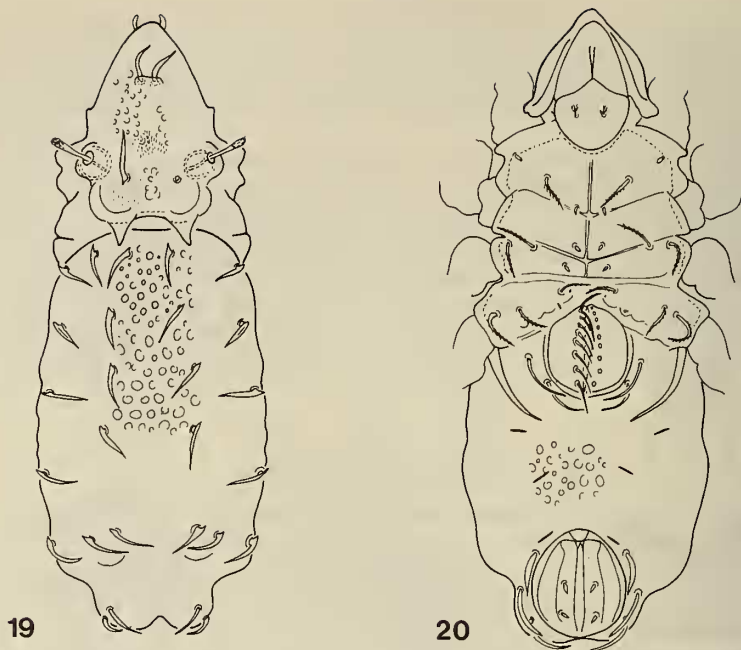
Cyrthermannia foliata sp. n. — 16: dorsal side, 17: setae of notogaster, 18: ventral side.

Ventral side (Fig. 20): Epimeral surface punctate. Setal formula: 3-1-3-3. Setae *1a*, *1c*, *2a*, *3a* and *4b* short, stout, all other long, weakly dilated, ciliate. Nine pairs of long genital and two pairs of long aggenital setae, 2 pairs of short anal and three pairs of long, phylliform adanal setae present.

Material examined: Holotype: Ant-82/10; 1 paratype: from the same sample. Holotype: MHNG; paratype (804-PO-83): HNHM.

Remarks: The new species belongs to the *Cyrthermannia tuberculata* group, which is characterized by the one pair of processes on the hind margin of prodorsum. These species may be distinguished by the following key:

- 1 (6) Outer margin of notogastral foveolae smooth.
- 2 (3) Lamellar setae short, interlamellar setae thrice longer than former. Prodorsal processes wide, distance between them not greater than length of processes *vicinicornuta* Aoki, 1965
- 3 (2) Lamellar setae long, nearly as long, or little shorter than interlamellar ones. Prodorsal processes far from each other.



FIGS. 19-20.

Cythermannia guadeloupensis sp. n. — 19: dorsal side, 20: ventral side.

- 4 (5) Notogastral setae long, distance between c_1 and d_1 much shorter than length of seta c_1 . These setae broad phylliform *tuberculata* Balogh, 1958
- 5 (4) Notogastral setae short, only two-thirds as long as distance between setae c_1 and d_1 . Notogastral setae much thinner *guadeloupensis* sp. n.
- 6 (1) Outer margin of notogastral foveolae wavy and sometimes interrupted.
- 7 (8) All prodorsal and notogastral setae thin, simple setiform *stellata* Balogh, 1970
- 8 (7) Some of the prodorsal or notogastral setae thickened and with a proximal spur.
- 9 (10) Sensillus very short, peduncle not longer than its round head. Hind prodorsal margin straight *luminosa* Hammer, 1971
- 10 (9) Sensillus long, its head not sharply separated from peduncle. Hind prodorsal margin wavy *florens* Balogh et Mahunka, 1980

Antillobodes gen. nov.

Family *Carabodidae*. Typical Carabodoid habitus. Lamellae with free, but strongly curved cusps, fitting close to the margin of oral region. Ten pairs of notogastral setae present. Five pairs of genital, one or two pairs of aggenital, two pairs of anal and three pairs of adanal setae, ad_3 in preanal position. Pori *iad* far removed from anal opening. Slight sexual dimorphism present, male with genital gland (!). All legs with one claw.

Type species: *Antillobodes calcaratus* sp. n.

Remarks: The new genus differs from all hitherto known genera in the family *Carabodidae* by the number of genital setae, the cusps of lamellae and by the genital gland of the male.

Antillobodes calcaratus sp. n.

FEMALE

Measurements: Length: 485-510 μm , width: 272-297 μm .

Dorsal side (Fig. 21): Rostrum rounded. Rostral setae long, comparatively thin. Lamellar and interlamellar setae slightly dilated, curved, phylliform, interlamellar ones much longer. Both pairs of setae covered by small spines. Sensillus (Fig. 25) long, its head dilated and with similar spines as on setae. Surface ornamented with round tubercles. Notogaster with a weak marginal border. Ten pairs of short, wide phylliform notogastral setae (Fig. 24) present.

Ventral side (Fig. 22): All apodemes well developed. Surface of epimeres with some spots. Epimeral setal formula: 3-1-3-3. All setae slightly dilated and squamose. Setae *1a* and *1c* minute, hardly discernible. Genital setae long, all longer than distance between setae. Two pairs of aggenital setae also long. Adanal setae similar in shape but slightly shorter than notogastral setae. *Iad* pori minute.

MALE

Measurements: Length: 431-450 μm , width: 232-248 μm .

Slightly smaller than female, but besides the genitalia wholly identical with female. In the genitalia one pair of a gland (?) exists, with long curved ductus (Fig. 23).

Material examined: Holotype (\varnothing): Ant-82/2; 4 \varnothing and 7 σ paratypes: from the same sample. Holotype and 6 (2 \varnothing , 4 σ) paratypes: MHNG; 5 (2 \varnothing , 3 σ) paratypes (805-PO-83): HNHM.

Remarks: See after the description of the following new species.

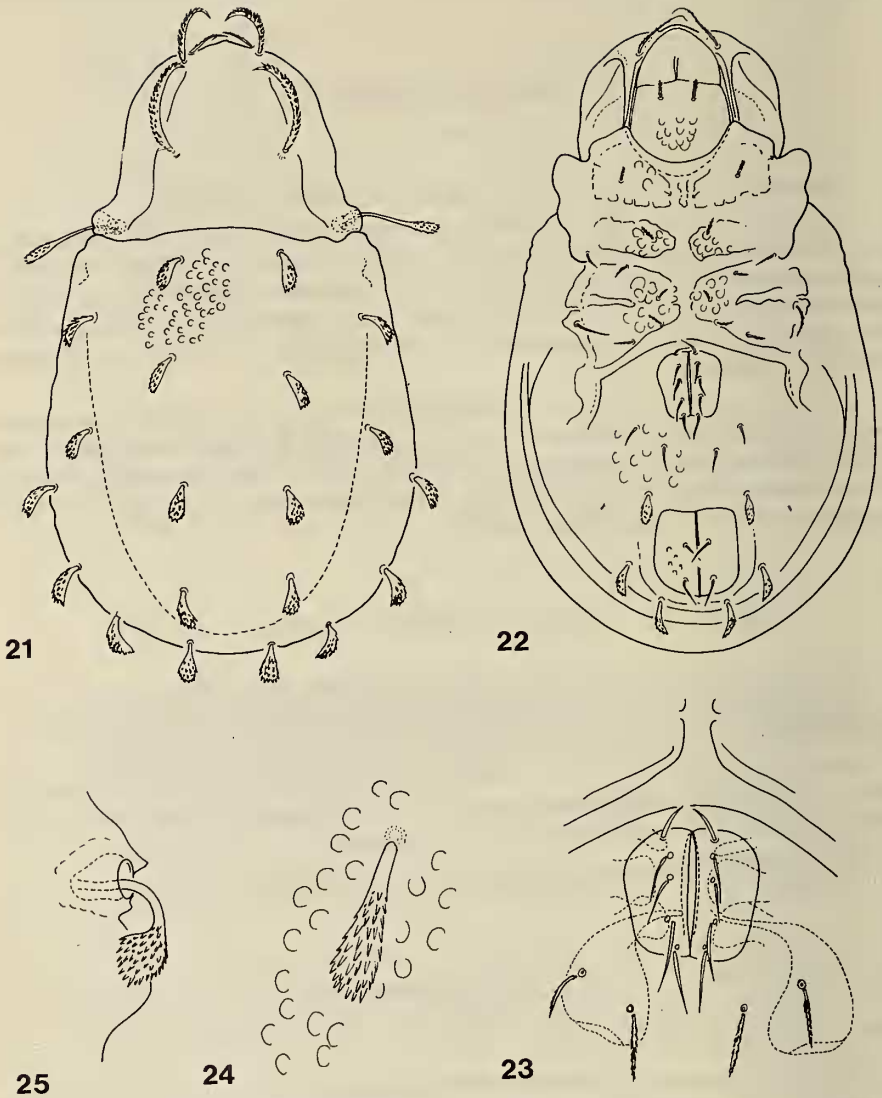
Antillobodes inopinatus sp. n.

FEMALE

Measurements: Length: 445-470 μm , width: 252-272 μm .

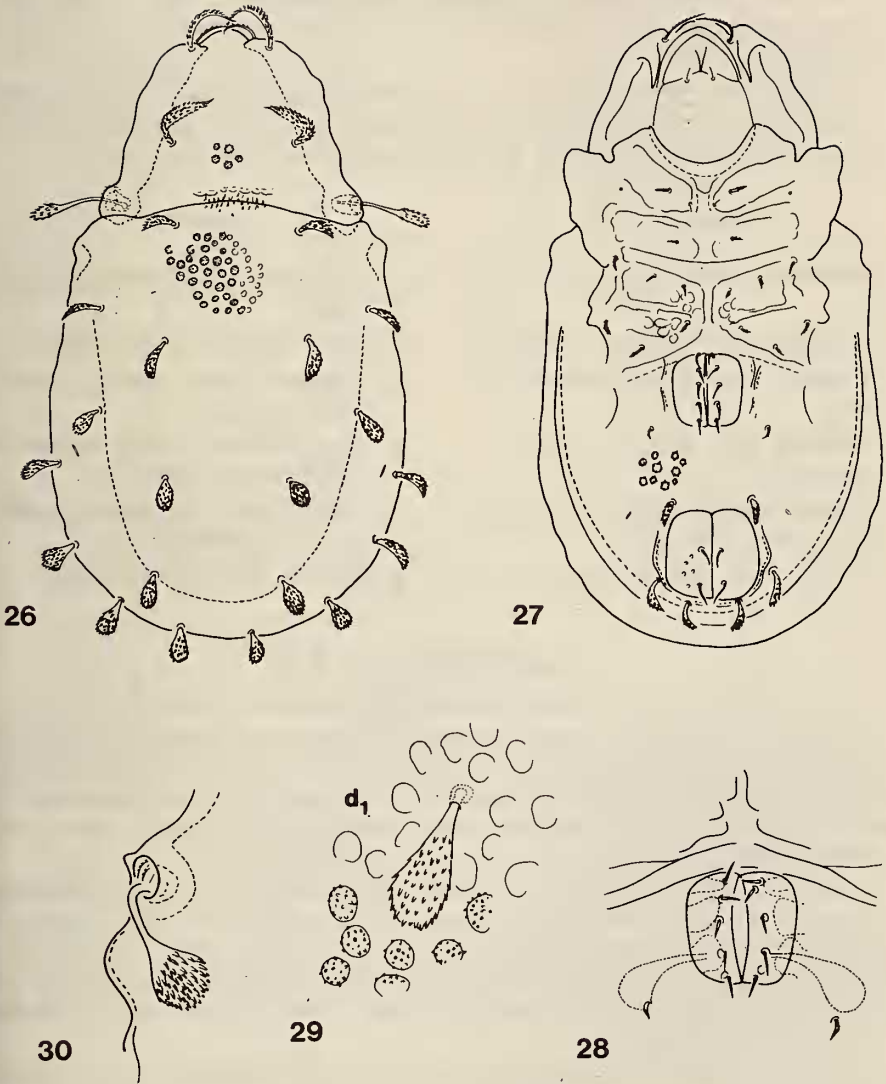
Dorsal side (Figs 26): Similar to the preceding species however, interlamellar setae shorter, wider and curving mostly inward. Surface with tiny, spiniform secretion elements, sitting also on tubercles (Fig. 29).

Ventral side (Fig. 27): Lamellar spines shorter but wider than in the preceding species. All epimeral setae short, especially setae *1b*, *3c* and *4c*. Genital setae and one pair of aggenital setae also short. Genital setae shorter than distance between two setae.



FIGS. 21-25.

Antillobodes calcaratus gen. n., sp. n. — 21: dorsal side, 22: ventral side, 23: genital region (σ), 24: sculpture of notogaster around seta d_1 , 25: sensillus from dorsolateral view.



FIGS. 26-30.

Antillobodes inopinatus sp. n. — 26: dorsal side, 27: ventral side, 28: genital region (σ), 29: sculpture of notogaster around seta d_1 , 30: sensillus from dorsolateral view.

MALE

Measurements: Length: 356 μm , width: 178 μm .

The two sexes are completely identical, only genitalia show some differences.

Material examined: Holotype (\varnothing): Ant-82/2; 4 \varnothing and 1 σ paratypes: from the same sample. Holotype and 3 (2 \varnothing , 1 σ) paratypes: MHNG; 2 (2 \varnothing) paratypes (806-PO-83): HNHM.

Remarks: The here described two *Antillobodes* species are very close, therefore it is especially interesting that both species were found in the same sample. However between both sexes some very constant distinguishing features can be established:

*calcaratus**inopinatus*

- | | |
|--|--|
| 1. Interlamellar setae thin and long. | 1. Interlamellar setae shorter and much wider. |
| 2. Surface of body without papillae. | 2. Surface of body with papillae. |
| 3. Lamellar cuspis long, with a sharp end. | 3. Lamellar cuspis shorter, thicker, with blunt end. |
| 4. Epimeral setae long, <i>4c</i> twice as long as <i>4b</i> . | 4. Epimeral setae short, <i>4b</i> and <i>4c</i> nearly equal in length. |
| 5. Genital setae long, longer than distance between the setae. | 5. Genital setae short, shorter than distance between the setae. |
| 6. Genital gland very large (Fig. 23). | 6. Genital gland small (Fig. 28). |

***Aeroppia sculpturata* sp. n.**

Measurements: Length: 729-810 μm , width: 453-534 μm .

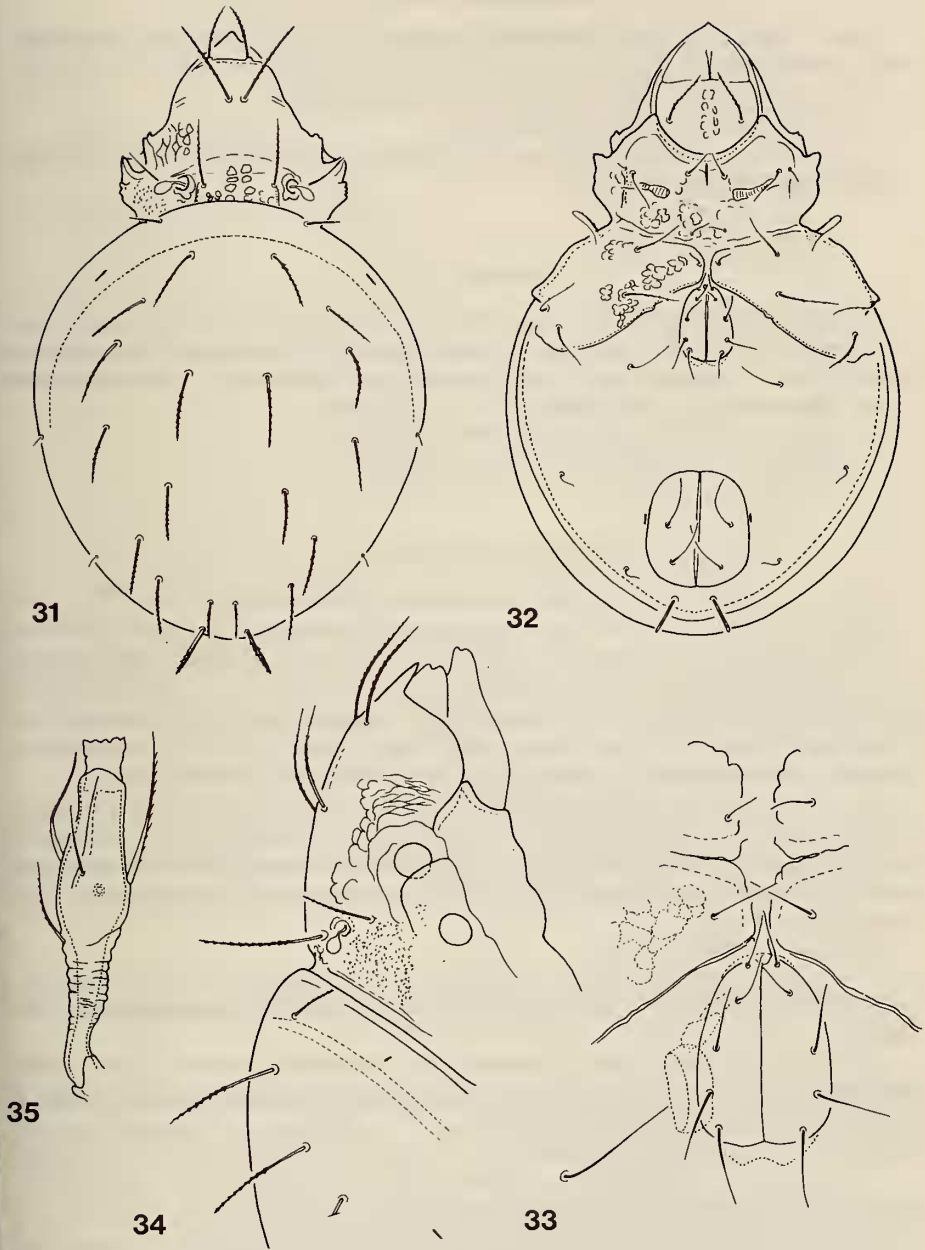
Dorsal side (Fig. 31): Rostrum elongate. Rostral setae arising on small tubercles each far removed from each other, situated laterally. Lamellar setae longer than interlamellar ones (Fig. 34), all prodorsal setae ciliate. Surface of prodorsum ornamented by spots, polygonal sculpture and granules. Thirteen notogastral setae present, *ta* short, only one-third as long as *te*. Setae *p*₂ and *p*₃ minute, *p*₁ typically thickened.

Ventral side (Fig. 32): Apodemes weakly developed, short and sometimes thin. Surface of epimeres ornamented by fields of spots. Epimeral setae long, excepting *1c*. Genital plates (Fig. 33) elongated, much smaller than anal ones. Five pairs of simple genital setae present. Aggenital setae originating near to the genital opening, simple. All anal and two pairs of adanal setae also thin, one pair of adanal setae (*ad*₁) thick and air-filled, like *p*₁. They are of equal length.

Legs: All legs very long and thin, the joints wrinkled, especially the basal part of femur (Fig. 35).

Material examined: Holotype: Ant-82/15; 10 paratypes: from the same sample. Holotype and 6 paratypes: MHNG; 4 paratypes (807-PO-83): HNHM.

Remarks: The new species stands near to *A. columbiana* Hammer, 1961, however, the exostigmatal and *ta* setae of the latter species are equally long, in the new species setae *ex* twice longer than *ta*, and both pairs of air-filled setae equal in length.



FIGS. 31-35.

Aeroppia sculpturata sp. n. — 31: dorsal side, 32: ventral side, 33: genital region, 34: prodorsum from lateral view, 35: femur of leg I.

Antilloppiinae subfam. nov.

Family *Oppiidae*. Sternal apodeme not developed. Apodeme 4 straight, directed forwards. Genital openings situated near to the very large and long anal plate, distance between them much shorter than the diameter of genital openings.

Type genus: *Antilloppia* gen. nov.

Remarks: The new genus stands very far from the hitherto known Oppioid taxa; a detailed revision seems desirable.

Antilloppia gen. nov.

Rostrum not incised. Rostral setae thick and arising on the surface of prodorsum. Costula and crista absent. Notogaster elongated anteriorly, dorsosejugal region reaching forward as far as the region between interlamellar setae. Twelve pairs of notogastral setae present. Ventral side as in the description of the subfamily.

Type species: *Antilloppia schauenbergi* sp. n.

Remarks: See after the subfamilial diagnosis.

Antilloppia schauenbergi sp. n.

Measurements: Length: 213-223 μm , width: 108-113 μm .

Dorsal side (Fig. 36): Rostrum elongate. Rostral setae arising on a transverse lath, near to each other, very thick, with long cilia. Lamellar setae shorter than preceding ones, but longer than interlamellar setae. A pair of well-developed spots, resembling areae porosae in interbothridial position. Sensillus with a large and clavate head, its surface verticillately ciliate. Pedotecta 2-3 with sharp setae directed laterally (Fig. 38), *la* arising on it. Pedotecta 4 rounded laterally. Twelve pairs of notogastral setae, all well ciliate.

Ventral side (Fig. 37): Epimeral surface ornamented with large spots. Epimeral setal formula: 3-1-3-3. Setae *lc* arising on the margin of pedotecta 2-3. All setae slightly ciliate. Five pairs of short, simple genital, one pair of similar aggenital setae in paragenital position. Anal plates nearly triangular, pori *iad* in adanal position. Setae *ad*₁ and *ad*₂ arising behind anal plates.

Legs: All with one claw.

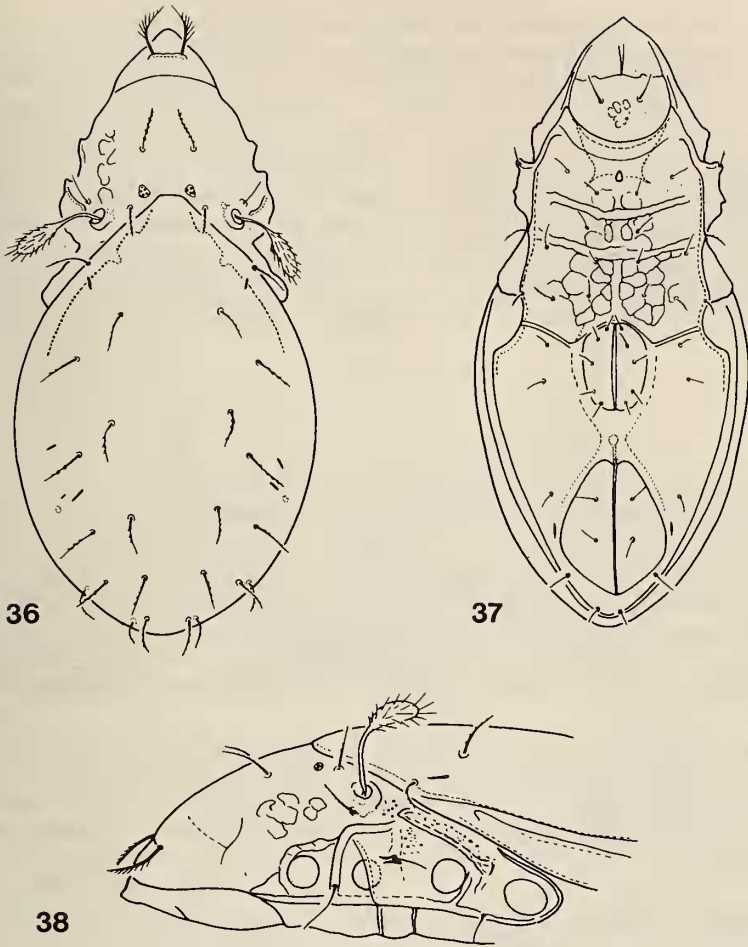
Material examined: Holotype: Ant-82/8; paratype: from the same sample; 2 paratypes: Ant-82/15. Holotype and 2 paratypes: MHNG; 1 paratype (808-PO-83): HNHM.

Remarks: On the base of the shape of the anogenital region the new species highly diverge from the other Oppioid species and resembles the genera *Micreremaeus* or *Eremaeus*.

Rioppia comteae sp. n.

Measurements: Length: 346-386 μm , width: 143-164 μm .

Dorsal side (Fig. 39): Rostrum wide, gradually narrowing anteriorly. Rostral setae arising on the dorsal surface of prodorsum, comparatively close to each other. Prodorsum without true costulae, but a thin line and a weak rib extending from bothridium to lamellar setae. Behind bothridia a strong chitinous lath present, with two pairs of larger



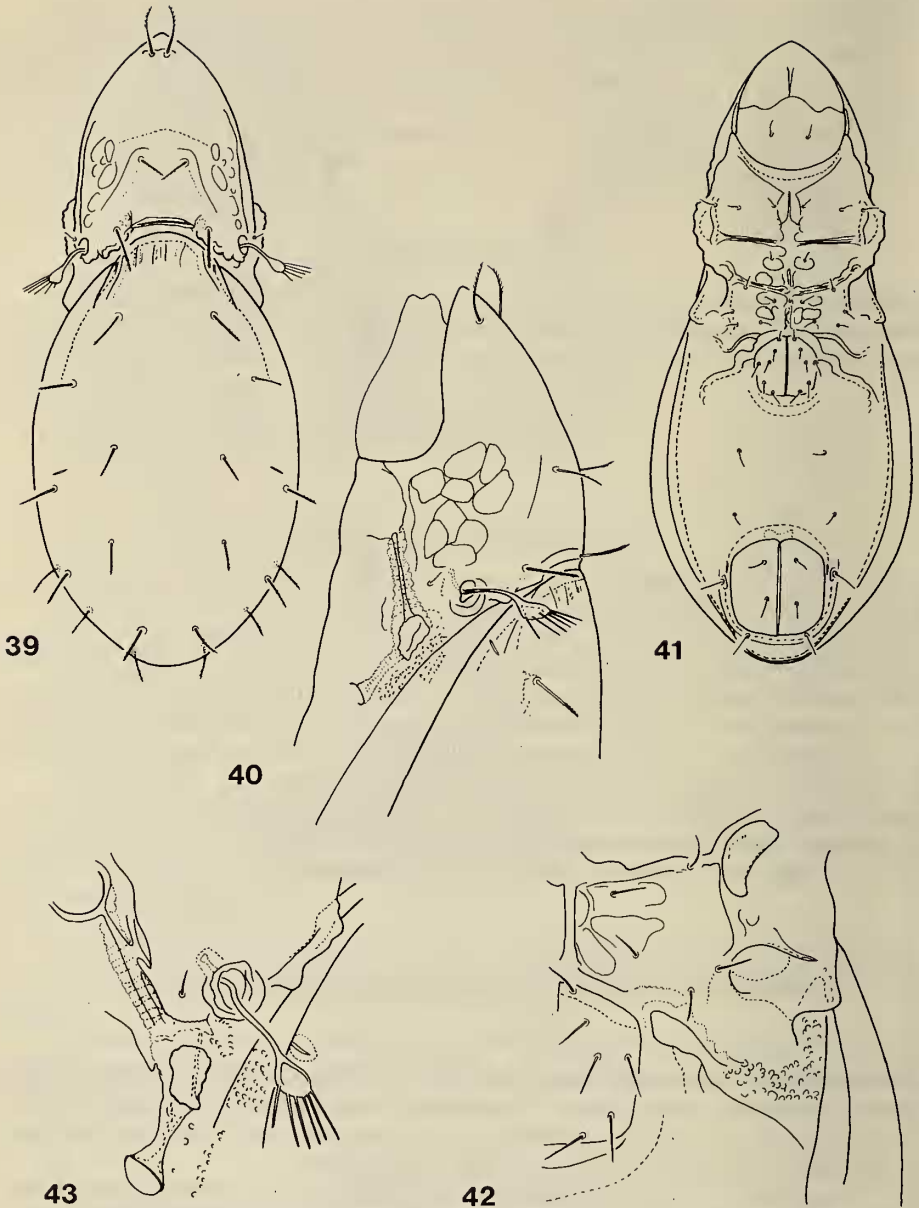
FIGS. 36-38.

Antilloppia schauenbergi gen. n., sp. n. — 36: dorsal side, 37: ventral side, 38: prodorsum from lateral view.

tubercles laterally. Peduncle of sensillus long, its head nearly round, with 5-6 assymmetrically arranged branches. Lateral surface of prodorsum granulate (Fig. 40). Anterior part of notogaster wavy, crista present. Ten pairs of stout, blunt notogastral setae, their distal end weakly ciliate. Setae *ta* arising far from dorsosejugal region.

Ventral side (Fig. 41): Distal end of chelicera and rutellum conspicuously dark brown. Lateral part of podosoma with well-framed hollows (Fig. 42) and/or canal ⁴.

⁴ In the original description of the genus (BALOGH & MAHUNKA 1977) no podosomal canal was mentioned. *Rioppia nodulifera* Balogh et Mahunka, 1977 has a similar configuration. Therefore the subfamilial rank is more justified.



FIGS. 39-43.

Rioppia comteae sp. n. — 39: dorsal side, 40: prodorsum from lateral view, 41: ventral side, 42: lateral part of epimeral region, 43: lateral part of exobothridial region.

Pedotectae very weakly developed. Surface of epimeres ornamented with large spots. Epimeral setae short, simple. Six pairs of simple genital and one pair of aggenital setae. Adanal setae similar to notogastral ones, ad_1 in postanal, ad_2 in paraanal and ad_3 in preanal position. Anal opening framed by a crest.

Material examined: Holotype: Comte/1; 18 paratypes: from the same sample. Holotype and 11 paratypes: MHNG; 7 paratypes (809-PO-83): HNHM.

Remarks: The new species belongs to the alliance of *Rioplia nodulifera* Balogh et Mahunka, 1977. However, it differs from this species by several features (prodorsal and dorsosejugal structure, shape of epimeral region, surface of the anogenital region⁵).

I dedicate the new species to Mrs. L. Comte, for her extensive help in our work and for the collecting of this remarkable material.

Scapheremaeus latus sp. n.

Measurements: Length: 371-386 μm , width: 242-257 μm .

Dorsal side (Fig. 44): Body conspicuously dilated, very wide. Rostrum rounded. Lamellar setae arising on the surface of prodorsum, no real costula, but some transversal and longitudinal laths present. Interlamellar region with some irregular crests. Sensillus large, club-shaped, directed backwards. Margin of notogaster well separated, its surface ornamented by mostly regular transversal laths. Surface in the middle part of notogaster divided by very strongly sclerotized, thick rugae, between them a weaker polygonal sculpture visible. Ten pairs of very minute notogastral setae, among them six pairs originating on the posterior lateral margin, two pairs in the middle part, and two pairs on the shoulders.

Ventral side (Fig. 45): Complete surface — excepting genital and anal plates — ornamented by minute rugae. Plates bearing longer rugae running mostly longitudinally. Some chitinous crests, among the genital plates and a transversal crest behind the anal plates present. All ventral setae very minute, six pairs of genital, one pair of aggenital, 2 pairs of anal and three pairs of adanal setae present. Setae ad_1 and ad_2 originating in postanal position, on the chitinous crest.

Material examined: Holotype: Ant-82/9; 1 paratype: from the same sample. Holotype: MHNG; paratype (810-PO-83): HNHM.

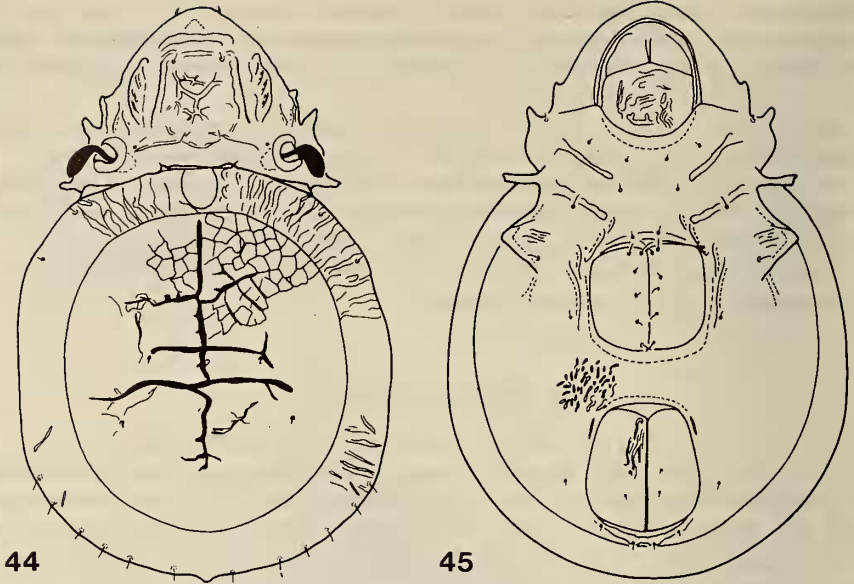
Remarks: The new species is well characterized by its habitus. No similarly wide species has hitherto been known in this genus. The notogaster also distinguishes the new species from its congeners.

Arthrovertex hauseri sp. n.

Measurements: Length: 543 μm , width: 275 μm .

Dorsal side (Fig. 46): Rostrum wide, rounded. Rostral setae short, slightly curving outwards, with some short cilia. Lamellae incurved, interlamellar region with strong crests. Lamellar setae minute, originating on lamellae. Sensillus short, its head round, dark brown, aciculate. Notogaster with polygonally arranged chitinous laths, forming medially a longitudinal row of fields. Thirteen pairs of short notogastral setae present.

⁵ Foveolate in *R. nodulifera*, smooth in the new species.



FIGS. 44-45.

Scapheremaeus latus sp. n. — 44: dorsal side, 45: ventral side.

Ventral side (Fig. 47): Surface of epimeres ornamented by large tubercles, the anogenital region by some ribs. Epimeral setae minute, spiniform. Six pairs of genital setae present, g_6 much longer than the other ones. Anal and adanal setae short, resembling small spines.

Material examined: Holotype: Comte/2, MHNG.

Remarks: Four species are hitherto known to belong to the genus *Arthrovertex* Balogh, 1970. They can be identified by the following key:

- 1 (2) Notogaster without long costula medially, median part divided only into four large fields *segmentatus* Balogh, 1970
- 2 (1) Median part of notogaster either with a long costula or a series of small polygonal fields.
- 3 (4) Notogaster basally only with a long median longitudinal costula, median surface divided only into six larger fields *baloghi* Mahunka, 1978
- 4 (3) Notogaster without a long longitudinal costula, median surface divided into 14-20 smaller fields.
- 5 (6) Prodorsum without translamella and prelamella. In the middle of notogaster seven well-framed fields exist, last field completely framed *hauseri* sp. n.
- 6 (5) Prodorsum with translamella and prelamella. In the middle of notogaster only five completely framed smaller fields exist, last larger field open *ilocanus* Corpus-Raros, 1979

***Perxylobates sinlimes* (Hammer, 1971)**

This species was described by Hammer from Fiji. The specimens from Guadeloupe are easily identifiable with the description and the figures, though somewhat diverging by the visible lamellar setae (short and very thin) and the slightly ciliate interlamellar setae.

Locality: Comte/1 (4 specimens).

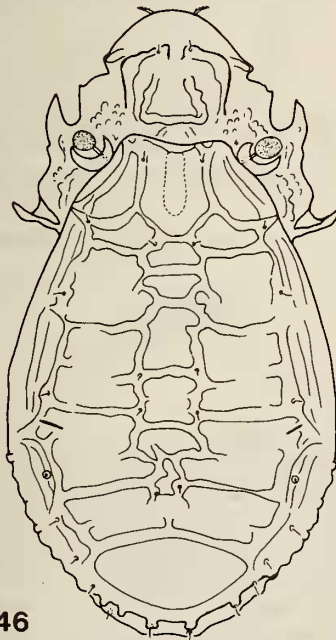
***Rostrozetes geneuxi* sp. n.**

Measurements: Length: 332-373 μm , width: 162-211 μm .

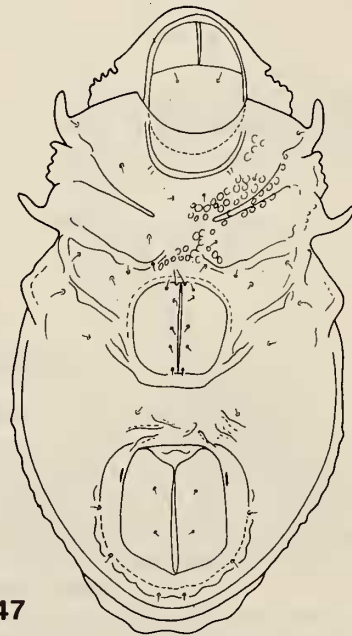
Dorsal side (Fig. 48): Anterior margin of prodorsum wavy, rostrum nasiform in lateral view (Fig. 51). Rostral setae much smaller (thinner and shorter) than the lamellar ones. Both pairs well ciliate. Interlamellar setae short and simple. Sensillus (Fig. 50) clavate, with spines. Surface of prodorsum with large foveolae. Dorsosejugal suture convex in the middle, behind interlamellar setae deeply concave, thereafter convex again. Ten pairs of short, simple notogastral setae present. Foveolae of notogaster also very large.

Ventral side (Fig. 49): All setae of anal side very short and simple. Surface well sculptured, foveolae of lateral part of body much larger than median ones. Among adanal setae one pair arising near to anterior corner of anal plates, before pori *iad*.

Material examined: Holotype: Geneux/1; 4 paratypes: from the same sample; 25 paratypes: Ant-82/8. Holotype and 17 paratypes: MHNG; 10 paratypes (811-PO-83): HNHM.



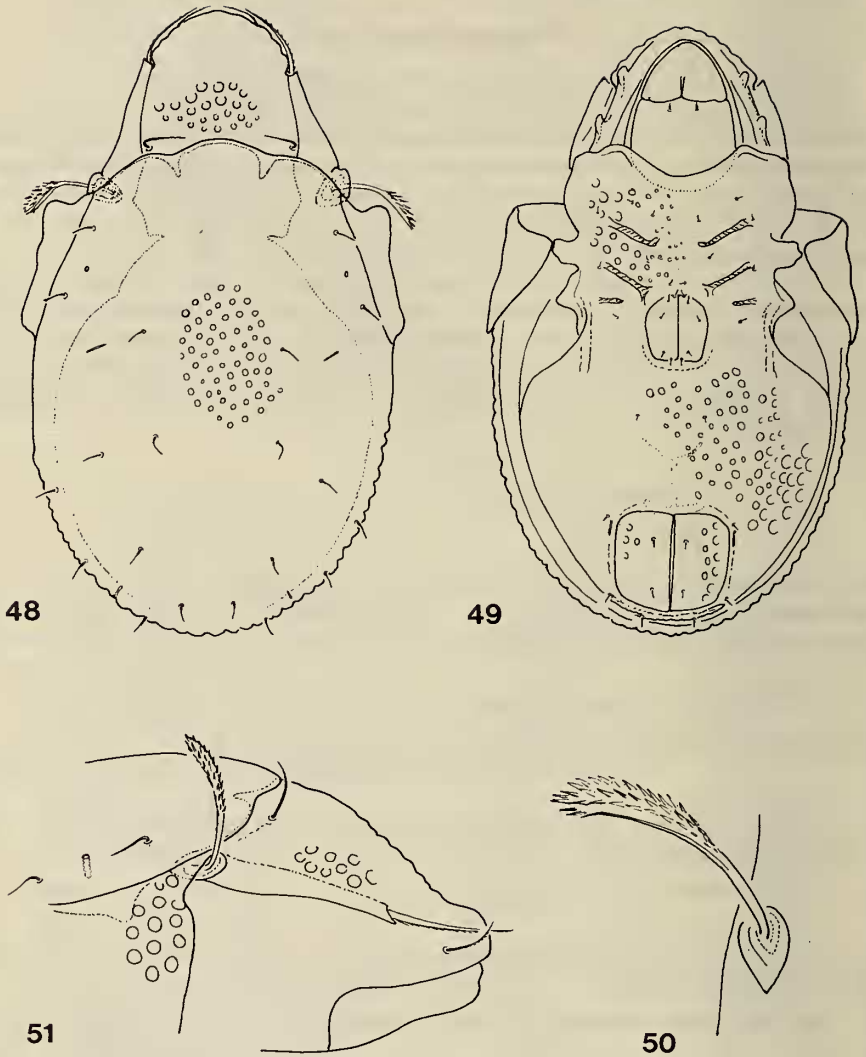
46



47

FIGS. 46-47.

Arthrovertex hauseri sp. n. — 46: dorsal side, 47: ventral side.



FIGS. 48-51.

Rostrozetes geneuxi sp. n. — 48: dorsal side, 49: ventral side, 50: sensillus, 51: prodorsum from lateral view.

R e m a r k s : The new species belongs to the *foveolatus* group. It differs from the related species by the wavy anterior margin of prodorsum and by the much larger foveolae of body.

I dedicate the new species to Mr J. Geneux, the collector of this material.

***Genavensia longiseta* sp. n.**

M e a s u r e m e n t s : Length: 297-312 μm , width: 237-252 μm .

D o r s a l s i d e (Fig. 52): Very similar in shape to the type of the genus, however, interlamellar setae very long and fine at tip. Sensillus club-shaped, large. Lamellar surface with transversal and longitudinal lines. Dorsejugal region and podosoma laterally densely but finely granulate (Fig. 53). Ten pairs of short dorsal setae and four pairs of areae porosae present.

V e n t r a l s i d e (Fig. 54): Pedotecta 1 with several rugae, surface of mentum also with transversal rugae (Fig. 55). Epimeral setae short, epimeral surface ornamented with some spots. Anogenital region without ornamentation, all setae simple, short. Six pairs of genital, two pairs of anal and two pairs of adanal setae.

M a t e r i a l e x a m i n e d : Holotype: Comte/2; 2 paratypes: from the same sample. Holotype and 1 paratype: MHNG; 1 paratype (812-PO-83): HNHM.

R e m a r k s : The new species stands very near to the type species of this genus (*Genavensia hungarorum* Mahunka, 1983) from Guatemala. However, it can be distinguished by the following characters:

hungarorum

1. Interlamellar seta reaching only to rostrum, blunt at tip.
2. Dorsejugal region finely striated, not granulated.
3. Mentum smooth (Fig. 56).

longiseta sp. n.

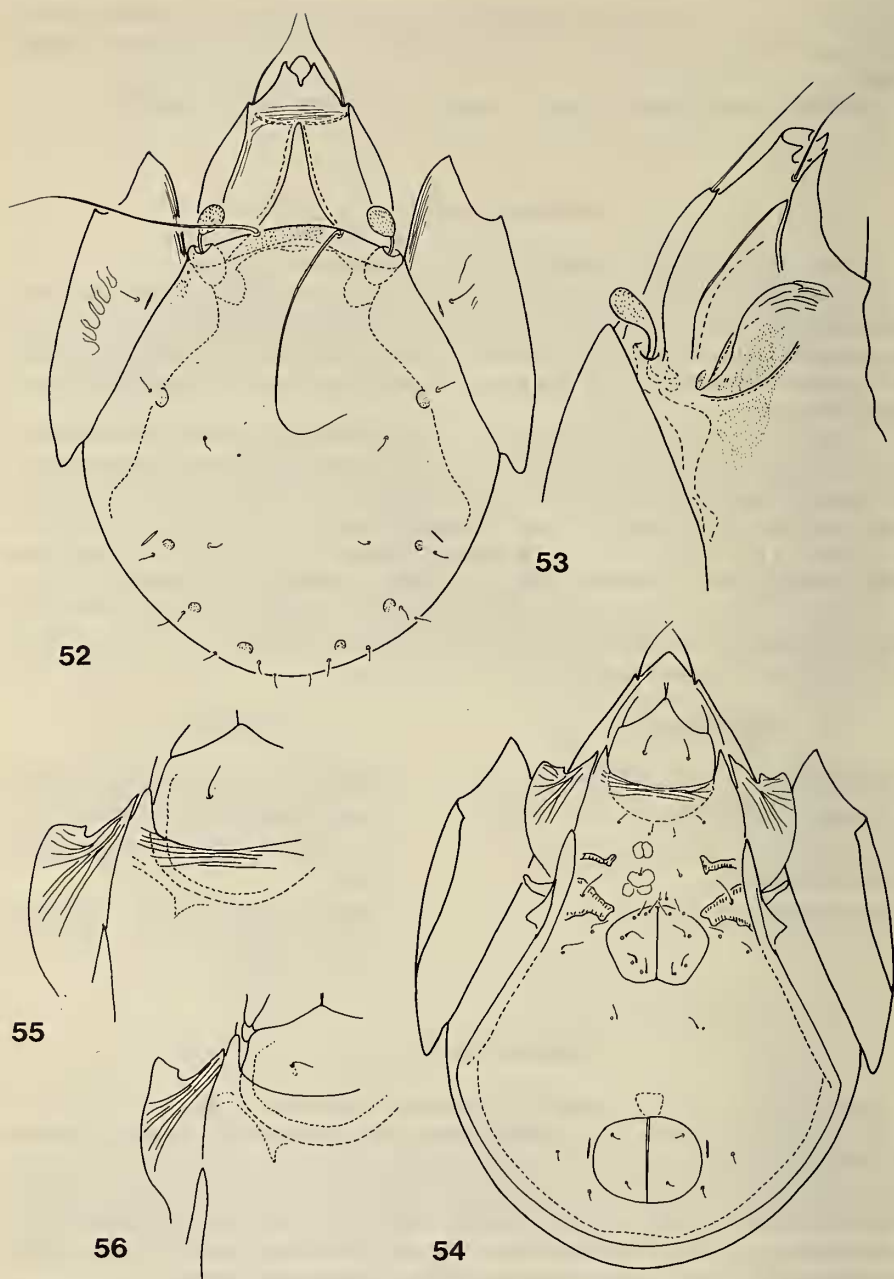
1. Interlamellar setae very long, much longer as prodorsum, filiform.
2. Dorsejugal region strongly granulated.
3. Mentum with strong transversal rugae (Fig. 55).

***Galumna hamifer* sp. n.**

M e a s u r e m e n t s : Length: 575-607 μm , width: 396-421 μm .

D o r s a l s i d e (Fig. 57): Rostrum strongly narrowed anteriorly with a triangular end. Rostral setae longer than lamellar ones. Interlamellar setae minute. Lamellar lines very long, reaching to basal quarter of prodorsum. Sensillus (Fig. 61) long, weakly spindle-shaped, its distal half ciliate. Dorsejugal suture interrupted medially. Pteromorphae with a strong sculpture. Araeae porosae well developed, *Aa* boomerang-shaped (Fig. 58), *A*₁ large and angulated (Fig. 60), *A*₃ elongated transversally. Median pori large.

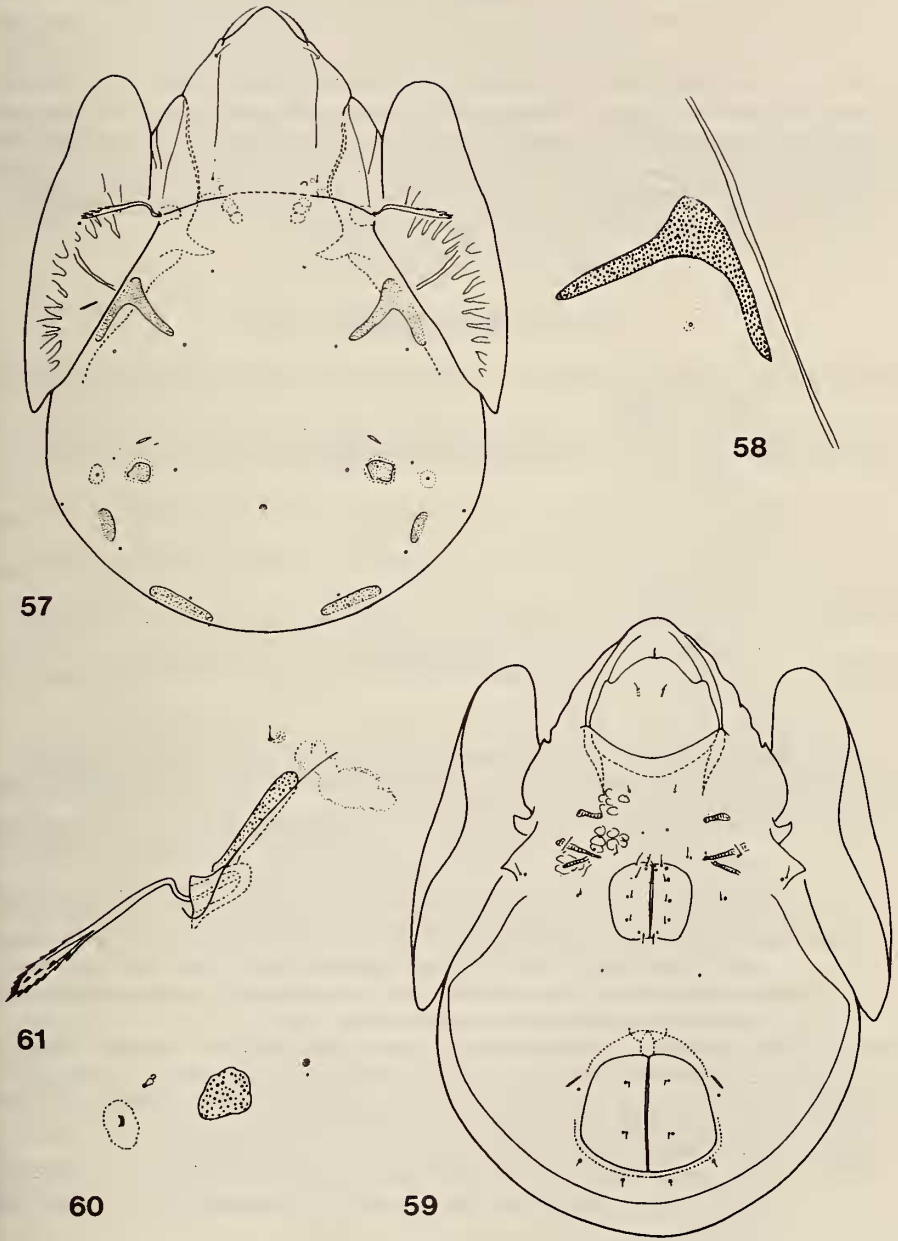
V e n t r a l s i d e (Fig. 59): Apodemes weakly developed. Epimeres with irregular spots. All epimeral setae minute, some represented only by their alveoli. Six pairs of short genital, 1 pair of aggenital, 2 pairs of anal and 3 pairs of minute adanal setae present. Pori *iad* situated in front of *ad*₃, not parallel with anal openings.



FIGS. 52-55.

Genavensia longiseta sp. n. — 52: dorsal side, 53: prodorsum from lateral view,
54: ventral side, 55: mental region.

Genavensia hungarorum Mahunka, 1982 — 56: mental region.



FIGS. 57-61.

Galumna hamifer sp. n. — 57: dorsal side, 58: *areae porosae adalares*, 59: ventral side, 60: *area porosa A₁*, 61: sensillus.

Material examined: Holotype: Ant-82/9, 12 paratypes: from the same sample. Holotype and 7 paratypes: MHNG; 5 paratypes (813-PO-83): HNHM.

Remarks: The new species stands very near to *Galumna imperfecta* Hammer, 1972⁶ from Tahiti. Hammer's description was based only on one incomplete specimen, therefore, it is not unlikely that both forms belong to the same species. However, they can be distinguished from each other by the shape of the *areae porosae adalares* (*Aa*), which are T-shaped in *imperfecta* and boomerang-shaped in the new species. The lamellar lines and the sculpture of the pteromorphae also differ in the two species. The shape of *Aa* is similar also in two of the other species: *G. cuneata* Aoki, 1961 and *G. montana* Hammer, 1977, however, both have long, well-developed interlamellar setae.

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⁶ Emended spelling instead of *imperfecta*. The spelling *imperfecta* in the original description is certainly due to a printer's error, in the same publication the spelling *imperfecta* is also used (p. 56 and p. 65).